

Amendments to the Claims:

Claims 1-6. (cancelled).

1
7. (currently amended) A fruit juice extraction apparatus comprising: two fixed peeler cups and two moveable peeler cups attached to a chassis in mating pairs of fixed and moveable peeler cups, said cups being concave hemispheres, each pair being located at opposing ends of said chassis, where said moveable peeler cups are each attached to opposing ends of a single linear drive actuator for driving both movable peeler cups in a back and forth cycle, said moveable peeler cup at each of the ends of said linear actuator being driven in a manner such that when one or the other of said moveable peeler cups is opening to allow an article of fruit to fall within [[its]]a concave chamber formed in conjunction with its mating fixed peeler cup, said moveable peeler cup at the opposing end of said linear actuator is closing upon ~~said~~ an other article of fruit inside [[said]]a respective concave chamber formed by the intermeshing of said moveable and fixed peeler cups, and shearing a skin of said other article of fruit~~[[’s]]-skin~~ as it initiates [[the]]a peeling process and continues to complete [[the]]a juicing cycle by pumping a core of said other article of fruit~~[[’s core]]~~ through [[a]] one of two filtering means mounted respectively in each of said mating fixed peeler cups, each said filtering means having a cutting point at its forward opening and radially cut slits to permit said fruit’s core to enter completely into said filtering means which allows for the extracted juice to flow through and be collected in juice collection means connected to said fixed peeler cup, followed by the motion of [[a]] one of two plungers, associated respectively with each of the two fixed peeler cups, which travels through said respective filtering means and pushes directly on said other article of fruit’s core until said core is expelled completely from the forward end of said respective filtering means and, whereby, the each ~~dried fruit-core of said fruit~~ falls into and through the respective concave chamber formed by said respective fixed and moveable peeler cups, and is directed to further fall through a respective fruit core receiving means, whereby when one of said moveable peeler cups is in the full open position, said apparatus is positioned to commence another fruit juice extraction cycle.

2/
8. (original) The apparatus of CLAIM 7, wherein said pair of peeler cups positioned at one end of said apparatus are 180 degrees out of phase with respect to said pair of peeler cups at the opposing end of said apparatus.

3/
9. (currently amended) The apparatus of CLAIM 7, wherein when one of said moveable peeler cups moves back and away from one of said fixed peeler cups, said linear drive actuator drives said respective plunger through said respective filtering means, whereby said fruit's core is expelled completely from the forward end of said respective filtering means and ~~the dried fruit core~~ falls into and through said respective chamber formed by said fixed and moveable peeler cups.

4/
10. (original) The apparatus of CLAIM 7, further comprising spray nozzles mounted at selected positions on said chassis.

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5/
11. (currently amended) A fruit juice extraction apparatus comprising:
a chassis having mounted thereon juice extraction means;
said juice extraction means having means for storing ~~said~~ articles of fruit, said storing means having a plurality of apertures therein for allowing said articles of ~~said~~ fruit to be deposited between at least two pairs of mating concave hemispheres, each of said pairs having one movable and one fixed hemisphere;

drive means for actuating means for forcing each of the movable of said concave hemispheres against its mating fixed concave hemisphere, thereby pressing ~~[[an]]~~ one of said articles of ~~said~~ fruit deposited between said hemispheres;

each of said movable concave hemispheres having a central pin and each of said fixed concave hemispheres having a perforating tube filter for the extraction of juice from said articles of fruit, whereby ~~the~~ a core of said one of said articles of fruit ~~solid residue~~ is deposited in a receptacle and the ~~liquid~~ juice is passed through ~~[[a]]~~ the filter and then falls into a reservoir which has outlet ports therein.

6/
12. (currently amended) The apparatus of CLAIM 11, wherein said perforating tube 5/

filter has multiple transverse slits of increasing diameter from inside to outside.

~~7~~
13. (currently amended) The apparatus of CLAIM ~~11~~⁵, wherein each of said concave hemispheres having its concave surface defined by a plurality of spaced-apart radial blades.

~~6~~
14. (original) The apparatus of CLAIM ~~13~~⁷, wherein said radial blades of each of said hemispheres are of at least two different lengths.

~~9~~
15. (original) The apparatus of CLAIM ~~14~~⁸, wherein when said movable hemisphere is forced against its mating fixed hemisphere, said radial blades of said movable hemisphere are positioned intermediate said radial blades of said fixed hemisphere.

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~~10~~
16. (currently amended) The apparatus of CLAIM ~~11~~⁵, wherein said movable hemispheres are attached to opposing ends of said forcing means for driving both movable hemispheres in a back and forth cycle, said moveable hemispheres at each of the ends of said forcing means being driven in a manner such that when one of said movable hemispheres is opening to allow said article of fruit to fall between it and its mating fixed hemisphere, said moveable hemisphere at the opposing end of said forcing means is closing upon said fruit between it and said other of said fixed hemispheres and shearing said fruit's skin as it initiates ~~[[the]]~~ a peeling process and continues to complete the juicing cycle by forcing said fruit's core through its said perforating tube filter, whereby extracted juice flows to said reservoir.

~~11~~
17. (currently amended) The apparatus of CLAIM ~~16~~¹⁰, further comprising a respective plunger which moves through each of said respective perforating tube[s] filter and expels said fruit's core from the forward end of said respective perforating tube[s] filter and, whereby when one of said moveable hemispheres is in the full open position, said apparatus is positioned to commence another fruit juice extraction cycle.

18-20. (cancelled)

12
21.

(currently amended) A fruit juice extraction apparatus comprising:

a chassis having mounted thereon juice extraction means;

said juice extraction means having means for storing ~~said~~articles of fruit, said storing means having a plurality of apertures therein for allowing said articles of ~~said~~ fruit to be deposited between at least two pairs of mating radially cut and concave hemispheres, each of said pairs having one movable and one fixed hemisphere;

drive means for actuating means for forcing each of the movable of said concave hemispheres against its mating fixed concave hemisphere, thereby pressing ~~[[an]]~~one of said articles of said fruit deposited between said hemispheres;

each of said movable concave hemispheres having a central pin and each of said fixed concave hemispheres having a perforating tube filter for the extraction of juice from said articles of fruit, whereby ~~the solid residue~~a core of said one of said articles of fruit is deposited in a receptacle and the ~~liquid~~juice is passed through ~~the~~a filter and then falls into a reservoir which has outlet ports therein;

said filter comprising a cylindrical filter body of nontoxic materials, having connected at one end thereof a removable cylindrical perforating cutting edge terminating in a circular point, for perforating the peel of said article of fruit, whereby said moveable concave and radially cut hemisphere forces a core section of said fruit to enter said filter body, said filter body having a plurality of spaced-apart parallel transverse radial slits.

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22.

(original) The apparatus of CLAIM 21, wherein said transverse slits are of increasing diameter from inside to outside.

14
23.

(currently amended) A fruit juice extraction apparatus comprising: two fixed peeler cups and two moveable peeler cups attached to a chassis in mating pairs of fixed and moveable peeler cups, said cups being concave hemispheres, each pair being located at opposing ends of said chassis, where said moveable peeler cups are each attached to opposing ends of a single linear drive actuator for driving both movable peeler cups in a back and forth cycle, said moveable peeler cup at each of the ends of said linear actuator being driven in a manner such that when one of said peeler cups is opening to allow ~~[[an]]~~a first article of fruit to fall within ~~[[its]]~~a

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respective concave chamber formed in conjunction with its mating fixed peeler cup, said moveable peeler cup at the opposing end of said linear actuator is closing upon said a second article of fruit inside said a second respective concave chamber formed by the intermeshing of said moveable and fixed peeler cups, and shearing a skin of said second article of fruit[['s]]-~~skin~~ as it initiates [[the]a peeling process and continues to complete ~~thea~~ juicing cycle by pumping a core of said second article of fruit[['s]]-~~core~~ through a respective filtering means mounted in said mating fixed peeler cup, said respective filtering means having a cutting point at its forward opening and radially cut slits to permit said second article of fruit's core to enter [[completely into]] said respective filtering means which allows for the extracted juice to flow through and be collected in a juice collection means connected to said fixed peeler cup, followed by the motion of [[a]] one of two plungers associated respectively with each of the two fixed peeler cups, which travels through said filtering means and pushes directly on said second article of fruit's core until said second article of fruit's core is expelled completely from the forward end of said filtering means and, whereby, the dried fruit core of said second article of fruit is forced through said moveable peeler cups, and is directed to further fall through a fruit core receiving means, whereby when said moveable peeler cup is in the full open position, said apparatus is positioned to commence another fruit juice extraction cycle.

15
24. (original) The apparatus of CLAIM 23, wherein said pair of peeler cups positioned at one end of said apparatus are 180 degrees out of phase with respect to said pair of peeler cups at the opposing end of said apparatus.

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25. (currently amended) The apparatus of CLAIM 23, wherein when one of said moveable peeler cups moves back and away from one of said fixed peeler cups, said linear drive actuator drives said respective plunger through said respective filtering means, whereby the core of one of the articles of said fruit[['s]]-~~core~~ is expelled completely from the forward end of said respective filtering means and the dried fruit core falls into and through said respective chamber formed by said respective fixed and moveable peeler cups.

17
26. (original) The apparatus of CLAIM 23, further comprising spray nozzles mounted

at selected positions on said chassis.

¹⁸
27. (currently amended) The apparatus of CLAIM ¹⁴23, wherein a respective channel means is positioned in each of said moveable peeler cups to direct a number of said fruit cores forced through each respective said-moveable peeler cup to further fall through [[a]] said fruit core receiving means, said receiving means being angulated downwardly with respect to ~~the~~ said moveable peeler cup within which it is positioned.

¹⁹
28. (currently amended) A fruit juice extraction apparatus comprising:
a chassis having mounted thereon juice extraction means;
said juice extraction means having means for storing ~~said~~ articles of fruit, said storing means having a plurality of apertures therein for allowing said articles of said fruit to be deposited between at least two pairs of mating concave hemispheres, each of said pairs having one movable and one fixed hemisphere;

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cont.
drive means for actuating means for forcing each of the movable of said concave hemispheres against its mating fixed concave hemisphere, thereby pressing [[an]] one of said articles of said fruit deposited between said hemispheres;

each of said movable concave hemispheres having a respective central pin and each of said fixed concave hemispheres having a perforating tube filter for the extraction of juice from said articles of fruit, whereby ~~the solid residue is deposited in a receptacle and the liquid juice~~ is passed through [[a]] the filter and then falls into a reservoir which has outlet ports therein and ~~the dried fruit cores~~ of said articles of fruit [[is]] are forced through said moveable peeler cups, and are deposited in a receptacle.

²⁰
29. (currently amended) The apparatus of CLAIM ¹⁹28, wherein said perforating tube filter has multiple transverse slits of increasing diameter from inside to outside.

²¹
30. (currently amended) The apparatus of CLAIM ¹⁹28, wherein each of said concave hemispheres having its concave surface defined by a plurality of spaced-apart radial blades.

32/ 31. (original) The apparatus of CLAIM 30, wherein said radial blades of each of said hemispheres are of at least two different lengths.

23/ 32. (original) The apparatus of CLAIM 31, wherein when said movable hemisphere is forced against its mating fixed hemisphere, said radial blades of said movable hemisphere are positioned intermediate said radial blades of said fixed hemisphere.

24/ 33. (currently amended) The apparatus of CLAIM 28, wherein said movable hemispheres are attached to opposing ends of said forcing means for driving both movable hemispheres in a back and forth cycle, said moveable hemispheres at each of the ends of said forcing means being driven in a manner such that when one of said movable hemispheres is opening to allow one of said articles of fruit to fall between it and its mating fixed hemisphere, said moveable hemisphere at the opposing end of said forcing means is closing upon an other of said articles of fruit between it and said other of said fixed hemispheres and shearing a skin of said other article of fruit[['s]]-~~skin~~ as it initiates ~~the~~ a peeling process and continues to complete the juicing cycle by forcing a core of said other article of fruit[['s]]-~~core~~ through its said respective perforating tube filter, whereby extracted juice flows to said reservoir.

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7/5/05 25/ 34. (currently amended) The apparatus of CLAIM 33, further comprising ~~a~~ two plungers, a respective one of which moves through each of said perforating tube[[s]] filters and expels cores of said articles of fruit[['s]]-~~core~~ from the forward end of said respective perforating tube[[s]] filter and, whereby when one of said moveable hemispheres is in the full open position, said apparatus is positioned to commence another fruit juice extraction cycle.

26/ 35. (currently amended) A fruit juice extraction apparatus comprising: two sets of moveable peeler cups attached to a chassis in mating pairs of internal and external moveable peeler cups, said cups being concave hemispheres, each pair being located at opposing ends of said chassis, where said internal moveable peeler cups are each attached to opposing ends of a linear drive actuator for driving both sets of movable peeler cups in a back and forth cycle, said internal moveable peeler cups at each of the ends of said linear actuator being driven in a manner

such that when one or the other of said internal peeler cups is opening to allow an article of fruit to fall within ~~[[its]]~~ a concave chamber formed in conjunction with its mating external peeler cup, said internal moveable peeler cup at the opposing end of said linear actuator is closing upon ~~said an other article of fruit inside said a~~ respective concave chamber formed by the intermeshing of said internal and external moveable peeler cups, and shearing a skin of said other article of fruit~~[[s]]-skin~~ as it initiates ~~thea~~ peeling process and continues to complete ~~thea~~ juicing cycle by pumping a core of said other article of fruit~~[[s]]-core~~ through ~~[[a]]~~ one of two filtering means mounted respectively in each of said mating fixed peeler cups, each said filtering means having a cutting point at its forward opening and radially cut slits to permit said ~~fruit's~~ core to enter completely into said filtering means which allows for the extracted juice to flow through and be collected in juice collection means connected to said fixed peeler cup, followed by ~~thean~~ outward motion of the respective external moveable peeler cup so that ~~[[a]]~~ one of two plungers associated respectively with each of the two external moveable peeler cups ~~which~~ travels through said respective filtering means and pushes directly on said ~~fruit's other article of fruit's~~ core until said core is expelled completely from the forward end of said respective filtering means and, whereby, the each ~~dried fruit core of said fruit~~ is forced through said respective internal moveable peeler cup~~[[s]]~~, and is directed to further fall through a respective fruit core receiving means, whereby when said moveable peeler cup is in the full open position, said apparatus is positioned to commence another fruit juice extraction cycle.

²⁷
36. (original) The apparatus of CLAIM ²⁶ 35, wherein said pair of peeler cups positioned at one end of said apparatus are 180 degrees out of phase with respect to said pair of peeler cups at the opposing end of said apparatus.

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37. (currently amended) The apparatus of CLAIM ²⁶ 35, wherein when said internal moveable peeler cups move back and away from said external peeler cups, said linear drive actuator drives said plunger through said filtering means, whereby said fruit's core is expelled completely from the forward end of said filtering means and the dried fruit core falls into and through said chamber formed by said internal and external moveable peeler cups.

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38. (original) The apparatus of CLAIM ²⁶35, further comprising spray nozzles mounted at selected positions on said chassis.

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39. (currently amended) The apparatus of CLAIM ²⁶35, wherein a channel means is positioned in each of said internal moveable peeler cups to direct a number of said fruit cores forced through said internal moveable peeler cups to further fall through [[a]]said fruit core receiving means, said receiving means being angulated downwardly with respect to the said internal moveable peeler cup within which it is positioned.

³¹
40. (currently amended) A fruit juice extraction apparatus comprising:
a chassis having mounted thereon juice extraction means;
said juice extraction means having means for storing ~~said~~articles of fruit, said storing means having a plurality of apertures therein for allowing said articles of ~~said~~ fruit to be deposited between at least two pairs of mating concave hemispheres, each of said pairs having one internal movable and one external moveable hemisphere;

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drive means for actuating means for forcing each of the internal movable of said concave hemispheres against its mating external moveable concave hemisphere, thereby pressing [[an]] one of said articles of said fruit deposited between said hemispheres;

each of said external movable concave hemispheres having a central pin and each of said internal moveable concave hemispheres having a perforating tube filter for the extraction of juice from said articles of fruit, whereby ~~the solid residue is deposited in a receptacle and the liquid juice~~ is passed through [[a]]the filter and then falls into a reservoir which has outlet ports therein and the dried fruit cores of said articles of fruit [[is]]are forced through said respective internal moveable peeler cups, and are deposited in a receptacle.

³²
41. (currently amended) The apparatus of CLAIM ³¹40, wherein said perforating tube filter has multiple transverse slits of increasing diameter from inside to outside.

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42. (currently amended) The apparatus of CLAIM ³²41, ~~wherein~~ each of said concave hemispheres having its concave surface defined by a plurality of spaced-apart radial blades.

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43. (original) The apparatus of CLAIM ³³42, wherein said radial blades of each of said hemispheres are of at least two different lengths.

³⁵
44. (original) The apparatus of CLAIM ³⁴43, wherein when said internal movable hemisphere is forced against its mating external moveable hemisphere, said radial blades of said internal movable hemisphere are positioned intermediate said radial blades of said fixed hemisphere.

³⁶
45. (currently amended) The apparatus of CLAIM ³²41, wherein said internal movable hemispheres are attached to opposing ends of said forcing means for driving both internal movable hemispheres in a back and forth cycle, said internal moveable hemispheres at each of the ends of said forcing means being driven in a manner such that when one of said internal movable hemispheres is opening to allow one of said articles of fruit to fall between it and its mating external moveable hemisphere, said internal moveable hemisphere at the opposing end of said forcing means is closing upon an other of said articles of fruit between it and said other of said external hemispheres and shearing a skin of said other of said articles of fruit ~~[['s]]~~ ~~skin~~ as it initiates ~~[[the]]~~ a peeling process and continues to complete ~~the~~ juicing ~~eyele~~ by forcing said fruit's core through its said perforating tube filter, whereby extracted juice flows to said reservoir.

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46. (currently amended) The apparatus of CLAIM ³⁶45, further comprising ~~[[a]]~~ two plungers, a respective one of which moves through each of said perforating tube ~~[[s]]~~ filters and expels cores of said articles of fruit ~~[['s]]~~ ~~eore~~ from the forward end of said respective perforating tube ~~[[s]]~~ filter and, whereby when one of said internal moveable hemispheres is in the full open position, said apparatus is positioned to commence another fruit juice extraction cycle.